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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/656,295	09/08/2003	Hsiang Chen	CHEN3584/EM	CHEN3584/EM 8679	
23364	7590 11/01/2004		EXAMINER		
BACON & THOMAS, PLLC			PAPE, ZACHARY		
625 SLATERS FOURTH FLO			ART UNIT	PAPER NUMBER	
ALEXANDRIA, VA 22314			2835		
			DATE MAILED: 11/01/200	4 .	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/656,295	CHEN, HSIANG
Office Action Summary	Examiner	Art Unit
	Zachary M. Pape	2835
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period was preply received by the office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
<ol> <li>Responsive to communication(s) filed on <u>9-8-2</u></li> <li>This action is <b>FINAL</b>. 2b) ☑ This</li> <li>Since this application is in condition for allowar closed in accordance with the practice under E</li> </ol>	action is non-final.  nce except for formal matters, pro	
A) Claim(s) 1-6 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5) Claim(s) is/are allowed.  6) Claim(s) 1-6 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/o  Application Papers  9) The specification is objected to by the Examine	r election requirement.	
10) ☐ The drawing(s) filed on <u>08 September 2003</u> is/a  Applicant may not request that any objection to the  Replacement drawing sheet(s) including the correct  11) ☐ The oath or declaration is objected to by the Ex	are: a) accepted or b) objection of the drawing of the held in abeyance. See the drawing of the	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
	•	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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### **DETAILED ACTION**

1. The use of the trademark Mylar ™ has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

#### Specification

The specification is objected to because of the following informalities: the specification contains minor spelling errors. As an example Page 2, Line 1 of the specification contains the word "plat". Additionally on line 22 of Page 4 "an rotary axis" should be "a rotary axis". The specification is also missing certain words such as "send" on line 3 of Page 2 between "can" and "data". Finally on Page 5 Line 11 it is believed that "Fig. 1 and Fig. 3" should be correct to read, "Fig. 1 and Fig. 2". These are merely examples. Please review the application for other errors.

Appropriate correction is required.

#### Claim Objections

2. Claims 5, and 6 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a

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previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Particularly in claim 1, applicant mentions that, "the hidden keyboard is stored in a container". In claim 5, the applicant again recites that the keyboard is stored in a container. In another instance in claim 1 the applicant states, "a back cover having two pivot points on one side at a position on the two-third of the back side of said main system". In claim 6 applicant again recites, "the back cover with two said pivots is located on one side of the two-third of the backside of the said main system".

3. Claims 1 and 2 objected to because of the following informalities: In claim 1, line 11, the phrase "the indentation slot" lacks antecedent basis. It appears the phrase should be changed to "an indentation slot". Additionally in claim 1, line 14, the phrase "said container" lacks antecedent basis. It appears the phrase should be changed to "a container". Finally in claim 2, line 4, the phrase "said pivot axis" lacks antecedent basis. It appears the phrase should be changed to "a pivot axis".

In Claim 1 lines 9-10 the phrase "said back cover taking the two pivots as rotary axis to turn outward for a proper angle" should be deleted since the phrase has been cited earlier in the claim (Lines 5-6).

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1, 5, & 6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lin et al (U.S. Publication # 2004/0056843).

With respect to claim 1, Lin et al. discloses the use of a main system (2) having a touch screen (24) embedded in its front side, a back cover (21) having two pivots (22) on one side of the main system allowing the back cover to rotate outward to an open position (Paragraph 22, Lines 4-5) forming a standing support for the main system (Paragraph 29, Lines 1-3), a hidden keyboard (3) with a hinge located on the hidden keyboard side (4) connected to the indentation slots of the main system, where the hidden keyboard rotates along the rotary axis from a stored position in the container (23) to an outward position toward the touch screen display side of the main system (Paragraph 25, Lines 4-8).

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## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. in view of Goodrich et al. (Patent # 5,375,076). Lin et al. discloses the use of a main system (2) having a touch screen (24) embedded in its front side, a back cover (21) having two pivots (22) on one side of the main system allowing the back cover to rotate outward to an open position (Paragraph 22, Lines 4-5) forming a standing support for the main system (Paragraph 29, Lines 1-3), a hidden keyboard (3) with a hinge located on the hidden keyboard side (4) connected to the indentation slots of the main system (Fig 4), where the hidden keyboard rotates along the rotary axis from a stored position in the container (23) to an outward position toward the touch screen display side of the main system (Paragraph 25, Lines 4-8). Lin et al. further illustrates in Fig 4 that the two indentation slots are connected through the two sides of the pivot axis

Lin et al. fails to disclose the use of a communication line in a spiral shape passing through the pivot axis. Goodrich et al. illustrates in Fig 22 that a communication line (78) passes from the keyboard through the pivot axis of the keyboard and connecting to the main system (20) such that the communication line allows the keyboard, main system, and touch screen to communicate with

each other. (Column 5, Line 67; Column 6, Line 11) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Lin et al. with the teachings of Goodrich et al. to create a line of communication that is capable of transferring data from the keyboard to the main computer system regardless of the position of the keyboard relative to the main system.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. in view of Goodrich et al. as applied to claim 2 above, and further in view of England (Patent # 6,483,445). Lin et al as modified by Goodrich et al. in claim 2 above teaches the use of a communication line in spiral shape passing through the pivot axis between the pivoting keyboard and the main system. Lin et al. fails to teach the use of a soft, flat, bendable communication line.

England discloses the use of a ribbon cable (Fig 5, 42) as a connection between the display portion, and the keyboard and main system (Column 2, Lines 47-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lin et al. as applied to claim 2 above with the teachings of England. A flat ribbon cable provides the necessary flexibility to allow the main system and the pivoting keyboard to rotate relative to each other and not inhibit the communication between each element.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. in view of Goodrich et al. as applied to claim 2 above, and further in view of

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Raasch. Lin et al. as modified by Goodrich et al. in claim 2 above teaches the use of a communication line in spiral shape passing through the pivot axis between the pivoting keyboard and the main system. Lin et al. fails to teach the use of a Mylar ™ cable.

Raasch teaches the use of a Mylar ™ cable (Column 1, Lines 32-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Lin et al. as applied to claim 2 above with the teachings or Raasch to increase the resistance of the communication line to the environmental elements (i.e. moisture, mold, etc.).

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-2201. The examiner can normally be reached Mon. - Thur. & every other Fri. (8:00am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached at 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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